

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Claims 16 and 20 have been canceled without prejudice or disclaimer of the subject matter contained therein. Thus, the claims currently pending in this application are Claims 1-15, 17-19, 21 and 22. Claims 1-14, 21 and 22 have been withdrawn from consideration and so the only claims currently at issue are Claims 15 and 17-19, with Claims 15 and 19 being the only independent claims.

The Official Action observes that the phrase "such as" in Claim 18 is not as definite as it might otherwise be. That language has been changed and so withdrawal of the rejection based on the second paragraph of 35 U.S.C. § 112 is respectfully requested.

The Official Action sets forth three anticipatory rejections of independent Claims 15 and 19, one involving the disclosure contained in U.S. Patent No. 6,413,233 to *Sites et al.*, a second based on the disclosure contained in U.S. Patent No. 6,146,523 to *Kenley et al.* and the last involving the disclosure contained in U.S. Patent Application Publication No. 2001-0049608 to *Hochman*. Those rejections are respectfully traversed for at least the following reasons.

Independent Claim 15 is directed to a real-time monitoring system that performs real time communication with external apparatus, including medical apparatus, while also controlling the external apparatus and/or displaying conditions associated with the external apparatus. Independent Claim 19 is directed to a controlling method for a real-time

monitoring system for performing real time communication with external apparatus including a plurality of medical apparatus. Claims 15 and 19 have been amended relative to the original versions of those claims to delete the "means" terms and define with different wording the last clause.

Thus, as defined in amended independent Claim 15, the real-time monitoring system comprises a communication unit that communicates with the external apparatus, a display unit that displays the conditions of the external apparatus, a storage unit that stores one or more past communication data obtained by the communication unit and a control unit that controls the contents to be displayed on the display unit. A comparison unit compares the currently communicated data with past data stored in the storage unit to either output a non-change signal of predetermined data size or inhibit output of a signal to a control unit with the past data and the currently communicated data are identical. The method recited in independent Claim 19 involves storing one or more past communication data obtained by a communication unit communicating with the external apparatus, controlling contents to be displayed on a display unit, comparing currently communicated data with past data stored in the storage unit, and outputting a non-change signal of predetermined data size or inhibiting output of a signal to the control unit when the past data and the currently communicated data are identical. The application describes, for example in the middle portion of page 28 and near the bottom of page 30, outputting a non-change signal or inhibiting the output of a signal to the control unit, and this provides the potential for reducing the burden on information processing, even when a relatively large

number of external apparatus are employed. Also, it is possible to reduce the amount of information sent to a control unit, relative to the operation information from the external apparatus, thus also creating the potential for reducing the burden on information processing.

Sites et al. discloses an apparatus for automatically monitoring and controlling perfusion hypothermia treatment using a system that includes one or more programmed computers as well as mechanical and sensor subsystems. The Official Action observes that the discussion in lines 10-51 in column 7 and the discussion in lines 25-67 in column 16 of *Sites et al.* describe communication means, storing means, comparing means, displaying means, and controlling means. However, independent Claim 15, both as originally worded and as reworded in this Amendment, do not just define communication means, storing means, comparing means, displaying means and controlling means. It is thus not fully understood how the disclosure contained in *Sites et al.* is believed to be relevant to the claimed real-time monitoring system defined in independent Claim 15 or the claimed method defined in independent Claim 19.

Sites et al. describes that the temperature at a plurality of locations on or within a patient can be obtained, with temperature signals representative of such temperatures being fed to a computer system. The measured temperatures are compared to stored parameters in the computer system, whereupon a value is generated for use in controlling a change in the temperature of body fluid. Thus, considered with respect to the claimed system and method at issue here, there is no disclosure in *Sites et al.* of a comparison device that

compares currently communicated data with past data stored in a storage unit as recited in original Claim 15 and reworded Claim 15 submitted with this Amendment. Nor is there a disclosure of a method that involves comparing currently communicated data with past data stored in a storage unit as claimed in Claim 19. It necessarily follows that there is also no disclosure of a comparison unit that outputs a non-change signal of predetermined data size or inhibits output of a signal to the control unit when the past data and the currently communicated data are identical as recited in Claim 15. Similarly, *Sites et al.* cannot be said to describe outputting a non-change signal of predetermined data size or inhibiting output of a signal to a control unit when past data and currently communicated data are identical as recited in the claimed method. For at least these reasons, withdrawal of the anticipatory rejection based on the disclosure contained in *Sites et al.* is respectfully requested.

The Official Action also observes that the discussion in the top half of column 7 and the middle portion of column 11 of *Kenley et al.* describes communication means, storing means, comparing means, displaying means and controlling means. Similarly, the Official Action observes that paragraphs 0033-0039 of *Hochman* also describe communication means, storing means, comparing means, displaying means and controlling means. However, as pointed out above in connection with the discussion of the disclosure contained in *Sites et al.*, the claims at issue here do not recite just communication means, storing means, comparing means, displaying means and controlling means.

Kenley et al. discloses a user interface for a dialysis machine utilizing a touch screen together with a hard key to effect changes in parameters associated with operation of the machine and treatment. The user interface is connected to a central computer control system having both a host microprocessor and a backup safety microprocessor, the latter of which is directly wired to the hard key. Using the touch screen, the user can select new parameters associated with operation of the machine or a treatment session. Following this, the user presses the hard key, whereupon the host microprocessor and the backup safety microprocessor carry out a verification routine to ensure that the parameter entered by the user is appropriate for treating the patient. If the results of the verification procedure are positive, the user is instructed to press a second hard key to confirm the parameter change, thus causing performance of an additional verification check. Positive results from this additional verification check cause the parameter to be entered into the system memory.

There is thus no disclosure in *Kenley et al.* of a comparison device that compares currently communicated data with past data stored in a storage unit or a method by which currently communicated data is compared with past data stored in a storage unit. *Kenley et al.* is also lacking with respect to the aspect of the claimed system in which a comparison unit outputs a non-change signal of predetermined data size or inhibits output of a signal to the control unit when the past data and the currently communicated data are identical and the aspect of the claimed method involving outputting a non-change signal of predetermined data size or inhibiting output of a signal to the control unit when the past

data and the currently communicated data are identical. Indeed, as mentioned above, *Kenley et al.* is only concerned with verifying that a particular parameter modified by a user is acceptable for the particular patient or a particular treatment scheme for a patient.

It is thus submitted that the claimed inventions defined in independent Claims 15 and 19 are also patentably distinguishable over the disclosure contained in *Kenley et al.*

Hochman discloses a system for automatically administering drugs whereby an injection device or infusion pump is provided with a mechanism for reading information from a container holding the drug to be administered. The information on the container is checked for accuracy before administering the drug.

Like *Sites et al.* and *Kenley et al.* discussed above, *Hochman* does not disclose a comparison unit that compares currently communicated data with past data stored in a storage unit, and does not disclose outputting a non-change signal of predetermined data size or inhibiting output of a signal to the control unit when the past data and the currently communicated data are identical as recited in Claim 15. *Hochman* also fails to disclose a method such as recited in Claim 19 involving comparing currently communicated data with past stored data, and outputting a non-change signal of predetermined data size or inhibiting output of a signal to a control unit when the past data and the currently communicated data are identical.

For at least the reasons set forth above, it is submitted that the claimed system and method defined in independent Claims 15 and 19, and the dependent claims, is patentably distinguishable over the disclosures contained in *Sites et al.*, *Kenley et al.* and *Hochman*.

Accordingly, withdrawal of the rejections of record and allowance of this application are earnestly solicited.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application, the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

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Application No. 09/864,394
Attorney's Docket No. 019952-160
Mark-up of Claims - Page 1

Attachment to Amendment dated February 12, 2003

Mark-up of Claims 15 and 17-19

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15. (Amended) A real-time monitoring system for performing real time communication with external apparatuses including [one or more] a plurality of medical apparatuses, and controlling the external apparatuses and/or displaying [the] conditions of the external apparatuses, comprising:

[communicating means] a communication unit adapted for communicating with the external apparatuses;

[displaying means] a display unit adapted for displaying the conditions of the external apparatuses;

a control unit adapted for controlling contents to be displayed on the display unit;

[storing means] a storage unit adapted for storing one or more past communication data obtained by the [communicating means;] communication unit; and

[comparing means] a comparison unit adapted for comparing currently communicated data with past data[]; and

controlling means for controlling contents to be displayed on the displaying means, based on signals from the comparing means,

wherein he comparing means reduces the amount of the data and/or eliminates the amount of the data for the amount of signals to be sent to he controlling means, in the case where the past data and the current data are identical to each other in comparison with the case where the past data and the current data are different from each other] stored in said

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Mark-up of Claims 15 and 17-19

storage unit and either outputting a non-change signal of predetermined data size or
inhibiting output of a signal to the control unit when the past data and the currently
communicated data are identical.

17. (Amended) The real-time monitoring system according to claim 15, wherein the [communicating means] communication unit, the [comparing means] comparison unit and the [storing means] storage unit are unified, and are separated from the [displaying means] display unit and the [controlling means] control unit.

18. (Amended) The real-time monitoring system according to claim 15, wherein the external apparatuses is medical apparatuses comprising communicating means [such as infusion pumps] including at least any one of a liquid delivery pump and urinary volume [meters] meter, and the contents that are displayed on the [displaying means are] display unit include at least any one of operation and stop information, flows, alarm conditions from apparatuses, information of [administrated] used drugs, administration information and patient information.

19. (Amended) A controlling method for a real-time monitoring system for performing real time communication with external apparatuses including [one or more] a

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Mark-up of Claims 15 and 17-19

plurality of medical apparatuses, and controlling the external apparatuses and/or displaying the conditions of the external apparatuses, comprising [steps of]:

storing in [storing means] a storage unit one or more past communication data obtained by [communicating means] a communication unit for communicating with the external apparatuses;

controlling contents to be displayed on a display unit by a control unit;

comparing currently communicated data with past data stored in said storage unit by [comparing means] a comparison unit; and

[controlling contents to be displayed on the displaying means, based on signals from the comparing means,

wherein said method comprises a step in which the comparing means performs control to reduce the amount of the data and/or eliminate the amount of the data for the amount of signals to be sent to the controlling means, in the case where the past data and the current data are identical to each other in comparison with the case where the past data and the current data are different from each other]

outputting a non-change signal of predetermined data size or inhibiting output of a signal to the control unit when the past data and the currently communicated data are identical.